

CLAIMS

1. A fluid ejection device comprising:
nozzles;
firing resistors corresponding to the nozzles, wherein each firing resistor and corresponding nozzle are located in zones on the fluid ejection device, and wherein each zone has at least one firing resistor and corresponding nozzle; and
addressable select logic responsive to a select address to couple multiple fire pulses to the firing resistors in the zones so that selected firing resistors in the same zone are coupled to a same fire pulse.
2. The fluid ejection device of claim 1, wherein the select logic couples each fire pulse to a unique one or more zones for each value of the select address.
3. The fluid ejection device of claim 2 wherein the fluid ejection device is coupled to an electronic controller, wherein the select logic includes one or more multiplexers, and wherein the electronic controller provides the select address and the fire pulses.
4. The fluid ejection device of claim 1, wherein the zones are organized on the fluid ejection device into rows and columns, wherein if a value of the select address is a first select address, the select logic couples each fire pulse to each row so that each firing resistor in each zone in the row is coupled to the same fire pulse, and wherein if the value of the select address is a second select address, the select logic couples each fire pulse to each column so that each firing resistor in each zone in the column is coupled to the same fire pulse.

5. The fluid ejection device of claim 4 wherein the fluid ejection device is coupled to an electronic controller, wherein the select logic includes one or more multiplexers, and wherein the electronic controller provides the select address and the fire pulses.
6. The fluid ejection device of claim 1, further comprising:
feed slots, wherein each zone is defined to include only the nozzles in fluid communication with at least one feed slot, and wherein each feed slot has at least one zone.
7. The fluid ejection device of claim 6, wherein the nozzles in fluid communication with the at least one feed slot are disposed on the fluid ejection device to be adjacent to the at least one feed slot on either a first side or a second side of the at least one feed slot, wherein each zone is defined to include only the nozzles positioned on the first side, or only the nozzles positioned on the second side, and wherein either the first side or the second side has at least one zone.
8. The fluid ejection device of claim 1, further comprising:
at least two parallel and adjacent feed slots, wherein the nozzles are disposed on the fluid ejection device to be adjacent to the feed slots on either a first side or a second side of the feed slots, wherein each zone is defined to include only the nozzles in fluid communication with the adjacent feed slots.
9. A fluid ejection assembly, comprising:
at least one fluid ejection device, each fluid ejection device including:
nozzles;
firing resistors corresponding to the nozzles, wherein each firing resistor and corresponding nozzle are located in zones on

the fluid ejection device, wherein each zone has at least one firing resistor and corresponding nozzle; and

addressable select logic responsive to a select address to couple multiple fire pulses to the firing resistors in the zones so that selected firing resistors in the same zone are coupled to a same fire pulse.

10. The fluid ejection assembly of claim 9, wherein the select logic couples each fire pulse to a unique one or more zones for each value of the select address.

11. The fluid ejection assembly of claim 9, wherein the zones are organized on the fluid ejection device into rows and columns, wherein if a value of the select address is a first select address, the select logic couples each fire pulse to each row so that each firing resistor in each zone in the row is coupled to the same fire pulse, and wherein if the value of the select address is a second select address, the select logic couples each fire pulse to each column so that each firing resistor in each zone in the column is coupled to the same fire pulse.

12. The fluid ejection assembly of claim 9, further comprising:
fluid feed slots, wherein each zone is defined to include only the nozzles in fluid communication with at least one fluid feed slot, and wherein each fluid feed slot has at least one zone.

13. The fluid ejection assembly of claim 12, wherein the nozzles in fluid communication with the at least one fluid feed slot are disposed on the fluid ejection device to be adjacent to the at least one fluid feed slot on either a first side or a second side of the at least one fluid feed slot, wherein each zone is defined to include only the nozzles positioned on

the first side, or only the nozzles positioned on the second side, and wherein either the first side or the second side has at least one zone.

14. The fluid ejection assembly of claim 9, further comprising:
at least two parallel and adjacent fluid feed slots, wherein the nozzles are disposed on the fluid ejection device to be adjacent to the fluid feed slots on either a first side or a second side of the fluid feed slots, wherein each zone is defined to include only the nozzles in fluid communication with the adjacent fluid feed slots.
15. A method of firing a fluid ejection device, the method comprising:
providing a select address; and
coupling, based on the select address, multiple fire pulses to firing resistors located in zones so that selected firing resistors in the same zone are coupled to a same fire pulse, wherein each firing resistor and a corresponding nozzle are located in the zones, and wherein each zone has at least one firing resistor and corresponding nozzle.
16. The method of claim 15 further comprising:
coupling each fire pulse to a unique one or more zones for each value of the select address.
17. The method of claim 15 further comprising:
organizing the zones on the fluid ejection device into rows and columns;
coupling each fire pulse to each row so that each firing resistor in each zone in the row is coupled to the same fire pulse if the value of the select address is a first select address; and
coupling each fire pulse to each column so that each firing resistor in each zone in the column is coupled to the same fire pulse if the value of the select address is a second select address.

18. The method of claim 15 further comprising:
providing fluid feed slots wherein each zone for each fluid feed slot is defined to include only the nozzles in fluid communication with at least one fluid feed slot, wherein each fluid feed slot has at least one zone.

19. The method of claim 18 further comprising:
defining each zone to include only the nozzles positioned to be adjacent to the at least one fluid feed slot on either a first side or a second side, wherein either the first side or the second side has at least one zone.

20. The method of claim 15 further comprising:
providing at least two parallel fluid feed slots, wherein the nozzles are disposed on the fluid ejection device to be adjacent to the fluid feed slots on either a first side or a second side of the fluid feed slots, wherein each zone is defined to include only the nozzles in fluid communication with the adjacent fluid feed slots.